

## **V.10 Traffic**

Existing operations at the Field's Point facility and the presence of local industry in the vicinity of the site create automobile, light duty and heavy duty truck traffic on New York Avenue, Terminal Road, Service Road and Ernest Street. This current level of traffic volume would continue during the construction period as part of the total traffic volume. Vehicle traffic from workers commuting to the site, and from deliveries of construction materials, would increase the traffic flow during the construction period. This additional traffic is expected to be moderate.

Considering the current nature and levels of traffic in the area of the proposed work, no significant adverse impact on local traffic would be expected from implementing the project.

## **V.11 Noise**

The nature and level of existing noise in the area of the project site reflects the industrial character of the area. Noise is generated by traffic and industrial activity.

During construction of the proposed facilities, temporary noise impacts would result from construction traffic and activities.

Given the industrial character of the project location, noise resulting from implementing the project would not be expected to cause significant adverse impacts in the area. There would be no noise impact on the area after construction of the BNR facilities was completed.

## **V.12 Land Use**

The project site is the Field's Point Wastewater Treatment Facility. There are no wetlands, agricultural or forested areas on the site. There also is no private land use on the site, or land open to the public.

The site contains no parks or recreational areas, no wild and scenic rivers, no coastal zone areas, and no plant or animal communities. There are no known areas of historical or archaeological significance, except for several buildings of historical significance on the Field's Point Wastewater Treatment Facility site.

The location of proposed BNR facilities is in the 100 year flood zone as shown on the flood hazard boundary map presented in Figure V.12-1. Impacts will be

mitigated by protecting the proposed facilities against the 100 year flood condition.

Should additional land be required in the future for nitrogen removal facilities, the NBC could purchase the City of Providence land and building located adjacent to the north west corner of the FPWWTF site. The NBC would also be required to compensate the City for a replacement parcel and a building.

In summary, implementation of the BNR facilities project makes use of land that is currently the property of the Narragansett Bay Commission. This project would not encroach on private land, other public land, or environmentally sensitive areas.

### **V.13 Coastal Zone Management**

With or without the project, no adverse impacts to coastal areas are expected. The project would not adversely impact environmentally sensitive coastal areas, and would require no taking of public or private land in coastal areas.

### **V.14 Air Quality**

In the vicinity of the project site, existing air quality is characteristic of an urban industrialized area. Except for the possibility of dust and a minor increase in vehicular exhaust, during the construction period, no significant adverse air quality impacts is anticipated with the implementation of the project.

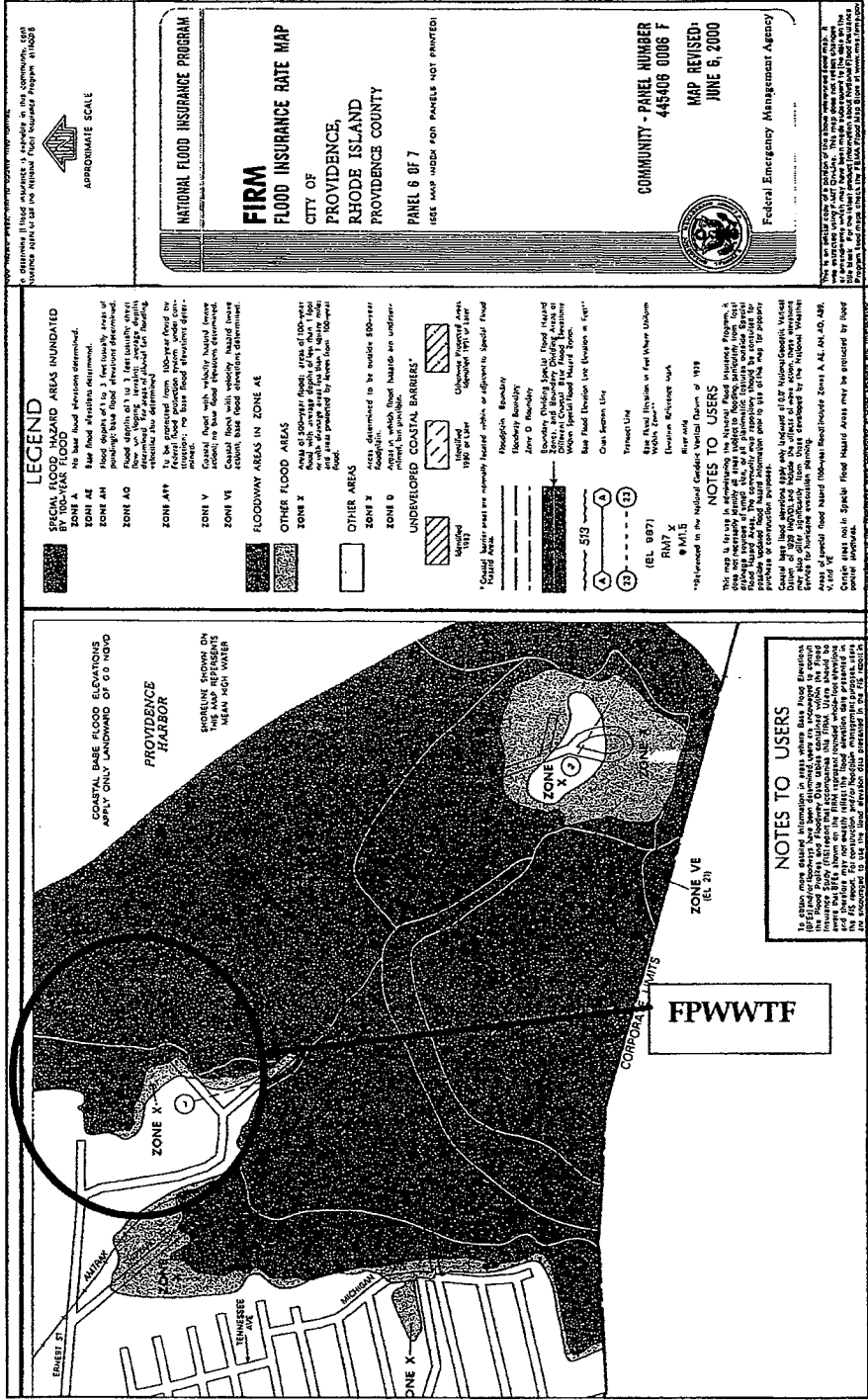


FIGURE V.12-1: FEMA MAP

## **V.15 Water Quality**

The water quality of the Providence River and Narragansett Bay is affected by the quality of the effluent from the FPWWTF. As discussed earlier, the intent of implementing the BNR facilities project is to enhance wastewater treatment at the facility by removing nitrogen from the facility's influent wastewater. With the project, the amount of nitrogen being currently discharged to the Providence River would be reduced.

During construction of the project, runoff at the site may carry some fine soil materials to the Providence River through the storm drain system. This may cause a slight increase in the turbidity of areas of the river. Erosion, runoff, and siltation control techniques, such as hay barriers, would be utilized to minimize the amount of material carried to the river. Groundwater removed from excavations, if required, will be likewise controlled to prevent silting of the river. Contaminated groundwater removed from excavations will be treated at the FPWWTF or otherwise handled in a manner acceptable to the Rhode Island Department of Environmental Management.

## **V.16 Water Supply**

The existing project site is not located in any watersheds that serve as drinking water sources and, therefore, the project will have no adverse impact on these sources. Potable water is supplied to the existing site area by the Providence Water Supply Board. The Project will not result in increased consumption of potable water.

Without the project, there would continue to be no adverse impact on drinking water sources.

## **V.17 Energy**

There are minimal energy commitments related to the BNR project during construction however over the long term there will be an increase in energy and chemical usage to operate the new system. Fuel will be required by construction equipment and by personnel commuting to the project site. An increase in electrical power use will result from operating BNR reactor mixers, additional blowers to provide more air for the nitrification process, nitrified effluent recycle pumps, pre-reactor bar screens and lighting and HVAC equipment in new buildings.

## V.18 Utilities

The existing project area is serviced by the electric power, gas, and water utilities.

With or without the project, no adverse impacts are expected on these utilities. With the project, new service connections will be required for the new mechanical equipment. The only impact on utilities might be the requirement that existing utilities be relocated prior to construction to avoid damaging them.

## V.19 Financial Impacts

User fees will increase with implementation of this project over current values. The increase in user fees for implementing the recommended BNR facilities (IFAS - floating media), based on the new facilities being operational in the year 2011, is estimated to be:

Residential:                      \$25.24 per year increase per dwelling

Commercial:                      9% per year increase per customer

If denitrification filters are installed in addition to the IFAS-floating media system, and based on facilities being operational in the year 2011, the estimated increase in user fees is estimated to be:

Residential:                      \$62.94 per year increase per dwelling

Commercial:                      21% per year increase per customer

The projected increases are associated solely with the biological nitrogen removal facilities and do not include increases associated with any other NBC project.

## V.20 Secondary Impacts

Implementation of the project would not result in any significant secondary impacts. The proposed facilities would not increase the capacity or service area of the existing treatment facility, and therefore, would not stimulate industrial or residential growth.

## V.21 Agency Review

Several agencies must review this EA. These agencies and their requirements are listed below:

<u>Agency</u>	<u>Requirement</u>
RIDEM	Review EA for consistency with requirements of RIDEM and EPA and Issue a Finding of No Significant Impact (FONSI) or require that an Environmental Impact Statement (EIS) be prepared
Coastal Resources Management Council (Coastal Zone Management)	Review EA for consistency with requirements of construction in coastal zones.
Rhode Island Historical Preservation Commission	Review EA - Designate historical sites if present.
City of Providence Department of Planning	Review EA with respect to existing and proposed land use.
State of R.I. Division of Planning	Review EA for consistency with Statewide Planning objectives.
RIDEM - Natural Heritage Program	Review EA for consistency with Natural Heritage objectives.
Narragansett Indian Tribe	Review EA for consistency with tribe objectives.
State of Rhode Island - Department of Transportation	Review EA for consistency with agency objectives
NOAA/NMFS - Habitat Conservation Division	Review EA for consistency with agency objectives.

## VI PUBLIC PARTICIPATION

The NBC held a public meeting on November 30, 2005 to present the results of the BNR alternatives evaluations. Minutes of the meeting, public advertisements and an attendance list are presented in Appendix F. The meeting agenda included a presentation of the basics of biological nitrogen removal followed by a discussion of the BNR alternatives evaluated. Following the discussion was a question and answer period.

No questions or comments arose that affected the conclusions and recommendations of this Facility Plan Amendment.

The NBC has distributed information on this project to the following governmental agencies for review:

State of R.I. Division of Planning

Natural Heritage Program  
Historic Preservation  
R.I. Department of Transportation  
Narragansett Indian Tribe  
NOAA/NMFS Habitat Conservation Division

A public hearing will be held to solicit final public comment and input.





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ATTACHMENT B

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May 25, 2007

Thomas K. Walsh, P.E.  
Engineer Director/Treasurer  
Upper Blackstone Water Pollution Abatement District.  
50 Route 20  
Millbury, MA 01527-2199

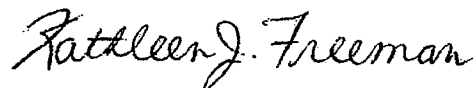
**Re: *Legal and Policy Comments on behalf of Upper Blackstone Water  
Pollution Abatement District ("District")  
Draft NPDES Permit No. MA0102369; State Permit No. M-181***

Dear Mr. Walsh:

Per your request, enclosed please find a summary of our legal and policy comments regarding the above-referenced draft permit and supporting documents, which were provided by the United States Environmental Protection Agency ("EPA"). These comments were prepared in consultation with Fredric Andes and Erika Powers of Barnes & Thornburg LLP. The attached comments are based on relevant information known and available to us as of the date of this submission.

Please note that, in response to our April 23, 2007 Freedom of Information Request ("FOIA"), EPA notified us, by letter dated May 22, 2007, that it has withheld approximately 650 pages of documents they deem responsive to, but exempt, from our request. On behalf of the District, we reserve any rights it may have to revise or update the enclosed comments, or submit further comments upon the draft permit in the event that further information is developed or obtained by the District either independently, through the public comment process and/or the final permit, or from improperly withheld documents relevant to this matter.

Sincerely,



Kathleen J. Freeman

Cc: Fredric Andes, Esq., Barnes & Thornburg, LLP  
Erika Powers, Esq., Barnes & Thornburg, LLP  
Robert Cox, Esq., Bowditch & Dewey, LLP  
John J. Gall, P.E., Vice President, CDM  
Jane Madden, P.E., Vice President, CDM

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Thomas K. Walsh, P.E., Engineer Director/Treasurer  
Upper Blackstone Water Pollution Abatement District  
Re: Comments on Draft NPDES Permit MA0102369  
May 25, 2007  
Page 2 of 2

Appendices:

Tab B-1: EPA's Response to District's Request for Extension to Public Comment Period, dated May 23, 2007.

Tab B-2: DEP letter to RIDEM, dated February 11, 2004, commenting on RIDEM Permits and Documents in Support of Permit Limits.

Tab B-3: *Guidance on Developing Nutrient Criteria for Protecting Designated Uses of Water Bodies*, Benjamin R. Parkhurst, Ph.D., et al., prepared for Federal Water Quality Coalition, Fredric Andes, Barnes & Thornburg, LLP.

Tab B-4: DEP, *Summary of Proposed Revisions to 314 CMR 4.00, Water Quality Standards*.

ATTACHMENT B

Summary of Legal and Policy Issues/Comments

May 25, 2007

**Draft NPDES Permit No. MA012369; Public Notice No. MA-016-07  
Upper Blackstone Water Pollution Abatement District  
50 Route 20  
Millbury, MA 01527**

This document outlines the District's legal and policy concerns with the draft NPDES Permit referenced above (the "Draft Permit") and provides constructive improvements for your consideration. As explained here and elsewhere in the District's set of comments, EPA should reconsider the requirements in the Draft Permit.

**A. GENERAL.**

The District's central objection to the Draft Permit concerns the underlying scientific criteria, data and methods used to interpret narrative water quality standards and develop waste load allocations resulting in the proposed imposition of unrealistic and unreasonable numeric limits, particularly those limits pertaining to nitrogen and phosphorus. The Draft Permit's limits are not supported by reliable, probative and substantial evidence and are not in accordance with law and EPA's own policies.

Several conditions of the Draft Permit are based upon clearly erroneous findings of fact and errors of law and implicate significant policy considerations. The data relied upon by EPA in determining certain nutrient limits is outdated and does not account for recent and ongoing upgrades and permit adjustments to municipalities discharging to the Blackstone River. Equally troubling is that EPA has acted on outdated information with full knowledge of the fact that updated information with respect to the water quality of the Blackstone River is currently being developed and should be available later this year.

On May 18, 2007, the District submitted a request for an extension of the public comment period to December 31, 2007 to allow sufficient time to complete an improved, more robust water quality model of the Blackstone River watershed and generate model results which are critical to making an informed decision and developing scientifically defensible permit limits for nitrogen and phosphorus. On May 23, 2007, the EPA denied this request, noting that the District's request does not include any discussion as to how, or even if, its model could be used to establish point source permit limits that "will ensure attainment of water quality standards in the Blackstone River and in Narragansett Bay." See Appendix, Tab B-1. Under the Clean Water Act ("CWA") that burden of proof is on EPA [not the District], and EPA has not done this. Pursuant to 40 C.F.R. § 122.44(d)(1), a water quality-based permit requirement is justified only if it is determined that the discharge will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard. Since EPA has not made any showing that the proposed limits in the Draft Permit are needed to prevent violations of, or that they will lead to attainment of, Rhode Island water quality, there is no legal basis for those limits.

Summary of Legal and Policy Issues/Comments (cont.)

Draft NPDES Permit No. MA012369; Public Notice No. MA-016-07

Upper Blackstone Water Pollution Abatement District

May 25, 2007

Page 2 of 19

The District is concerned that EPA is moving too quickly on implementing nutrient limits more stringent than those required by state law, and more stringent than those that will soon be achieved by the District in 2009, based on political considerations, insufficient or incorrect information, speculation and questionable scientific footing, which could cost the Blackstone River communities hundreds of millions of dollars without reaping discernable water quality benefits. Without explanation, EPA Region 1 seems to be rejecting the recommendation by EPA's national experts [the Science Advisory Board] that prior to installing expensive treatment technology, a comprehensive study of the watershed should be conducted to determine the need for and the effectiveness of other controls including, among others, non-point source controls, removing contaminated sediments, and dam removal/modification.<sup>1</sup>

We disagree with the apparent approach of the Agency in allocating responsibility for waste load removal mainly to point source dischargers without a commensurate effort aimed at the other significant sources [e.g., non-point sources, contaminated sediments originating from past discontinued practices, the presence of dams]. In addition, the District questions whether certain segments of the Blackstone River (particularly the reach to which the District discharges) were properly listed under Section 303(d)(1)(A) of the CWA, rather than some other more appropriate section, such as Section 303(d)(3).

The imposition of the Draft Permit's conditions to which the District objects exceeds the Agency's authority under the CWA, lacks sufficient support in the administrative record, is otherwise substantively and procedurally deficient, and based on an inappropriate exercise of discretion.

By imposing another state's water quality standards or legislative mandate [RI Gen. Laws §46-12-2(f); requiring that nitrogen discharges be reduced by 50% by December 31, 2008] on the District's facility, without the CWA-required demonstration that the District's discharge is causing or contributing to a violation of those out-of-state standards, is contrary to law. Among other things, it deprives the District and its ratepayers of their procedural due process rights to an adequate, meaningful opportunity to be informed of, and to participate in, the Rhode Island rulemaking process for the narrative standards upon which the total nitrogen limits are purportedly based. EPA's attempts to impose its own interpretation of state water quality standards, and its failure to respect and address the Massachusetts Department of Environmental Protection's ("DEP") objections and concerns regarding EPA's proposed nitrogen and phosphorus limits and conditions, violate constitutional federalism principles.

EPA has failed to consider or to adequately explain how the proposed nutrient limits which will cause the District to spend funds approaching \$200 million [with no guarantee or

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<sup>1</sup> See EPA Draft Science Advisory Board (SAB) Report: *Evaluation of the Blackstone River Initiative*, prepared by the Ecological Processes and Effects Committee, EPA-SAB-EPEC-98-XX, June 25, 1998; and *An SAB Report: Evaluation of the Blackstone River Initiative*, EPA-SAB-EPEC-98-011, September 1998.